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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------------|-------------|----------------------|---------------------|------------------|
| 10/674,263 | 09/29/2003 | Thomas Facke | PO7849/LeA 35,938 | 1765 |
| 157 | 7590 | 08/28/2006 | | EXAMINER |
| BAYER MATERIAL SCIENCE LLC | | | | SERGENT, RABON A |
| 100 BAYER ROAD | | | | |
| PITTSBURGH, PA 15205 | | | ART UNIT | PAPER NUMBER |
| | | | 1711 | |

DATE MAILED: 08/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|----------------------------|------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/674,263 | FACKE ET AL. |
| | Examiner Rabon Sergeant | Art Unit 1711 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 13 June 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-11 and 15-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-11 and 15-20 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ . |

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1. The terminal disclaimers filed on March 6, 2006 and June 13, 2006 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration dates of any patents issuing from U.S. applications 11/080,176, 11/080,706, 11/217,207, 11/217,727, and 11/217,728 have been reviewed and are accepted. The terminal disclaimers have been recorded.

2. Claim 16 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Support has not been found for the amendment to variable Y.

3. Claims 1-11 and 15-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Firstly, within claim 1, it is unclear if the language, “containing at least one allophanate group” and “containing at least one oxadiazinetrione group”, pertains to both the polyisocyanate and the polyisocyanate secondary product or only the polyisocyanate secondary product. The same issue exists within claim 16 for the definitions of the A variables and must also be addressed.

Secondly, with respect to claim 11, it is unclear how the amended language relates to the polyisocyanate secondary product. Furthermore, it is unclear which polyisocyanate is being referred to, the product or the reactant. Additionally, applicants have failed to set forth the basis for the claimed weight percent contents.

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Thirdly, with respect to claim 16, the use of “can be” in the definition of 1B and ^{n+1}B renders the claim indefinite, because it is unclear to what extent the language denoted by “can be” is optional. Furthermore, the position is maintained that the language “small amounts” is subjective and renders the claim indefinite, because it cannot be quantitatively determined what constitutes “small amounts”. Applicants have inferred that the language pertains to quantities of 20 wt % or less; however, this definition of “small amounts” has not been found within the specification. Additionally, no clear definition has been provided for variable R. Also, with respect to the definition of the A variables it is unclear if the reference to “isocyanate” refers to isocyanate groups and it is also unclear how the variables may be isocyanate secondary “products”, *per se*; it would seem that A must be a radical as opposed to a product.

Lastly, with respect to claims 15 and 20, the Markush group is improper in view of the use of the language, “selected from the group comprising”. Markush groups, by definition, are closed to the inclusion of additional species; therefore, they are to be denoted by the accepted closed language, “selected from the group consisting of”.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 11 and 15-20 are rejected under 35 U.S.C. 102(b) as being anticipated by CA 2356685.

The reference discloses polyisocyanates containing allophanate groups wherein an ethylenically unsaturated group, such as an acrylate, methacrylate, or vinyl ether, is attached

through the in chain allophanate group. See pages 4 and 5. The reference additionally discloses that stabilizers or reaction inhibitors may be incorporated within the composition and that the compositions are useful for coating substrates, such as vehicle bodies. See pages 9 and 17.

6. Applicants have argued that the polyisocyanates of the reference fail to contain the claimed quantities of groups recited within claim 11; however, applicants have not provided any data or evidence to support this statement. Absent such data or evidence, the position is taken that it is logical to conclude that the reference does disclose products that have the claimed quantities of the recited groups. After all, the products of the reference clearly possess allophanate groups, and it would be expected that any product resulting from the reaction of isocyanates with hydroxyl functional compounds would inherently contain a quantity of urethane groups. Furthermore, the reference teaches that the products are in general essentially free of uretdione groups; therefore, the reference provides for the presence of a limited quantity of such groups that would reasonably be expected to meet the lower end of applicants' claimed uretdione content range. Lastly, applicants' product need not contain any oxadiazinetrione groups. (It is noted that claim 11 remains indefinite for the aforementioned reason; however, in view of applicants' arguments, it has been assumed that the group and quantity limitations of claim 11 refer to the product, as opposed to the reactant.)

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (571) 272-1079.



RABON SERGENT
PRIMARY EXAMINER

R. Sergent
August 21, 2006